

## **PATENT**

# BEFORE THE BOARD OF PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In Re Application of  J. ERIC BERGE ET AL.		FOR: VACUUM PNEUMATIC SYSTEM FOR CONVEYANCE OF ICE		
Serial No.: 09/364,794	)		·	
Filing Date: July 30, 1999	)	Group Art Unit:	3653	

**REPLY BRIEF UNDER 37 C.F.R. § 1.193(b)(1)** 

Commissioner for Patents P.O. Box 2327 Arlington, VA 22202

Attention:

Jeffrey A. Shapiro

Examiner

**RECEIVED** 

SEP 2 5 2002

**GROUP 3600** 

Dear Sir:

This Reply Brief is filed under the provisions of 37 C.F.R. § 193(b)(1) to enable Appellants to response to issues newly raised by the Examiner in the Examiner's Answer filed on July 30, 2002.

United States addressed to:	ify that this correspondence is being deposited with the Postal Service as first class mail in an envelope Commissioner for Patents, P.O. Box 2327, Arlington, September 17, 2002	he
,		
	Karen Johnson	
	(Name)	
1	aun Johnson	_
	(Signature)	_
$\iota$	V	
	September 17, 2002	
	(Date of Signature)	

most ships for

#### RELATED APPEALS AND INTERFERENCES

The Examiner on page 2 of the Answer contends that Appellants' Brief does not contain any statement identifying related appeals or interferences. That is incorrect. Appellants specifically state on page 2 of their Brief that no such related appeals or interferences exist.

### STATUS OF CLAIMS

The issues addressed below relate to claim structure, claim status and claim withdrawals in this case; they are newly made by the Examiner and require response by Appellants. The Examiner's new assertions will be found on pages 2-6 and 21-25 of the Answer.

## A. Cancellation of Prior Copending Applications Does Not Establish that Appellants Assented to "Prolixity" or "Multiplicity" Arguments

The Examiner asserts that Appellants' cancellation of predecessor applications Ser. Nos. 09/1125,050 and 09/207,075 after the filing of this application is evidence that Appellants assented to the Examiner's "prolixity" and "multiplicity" arguments during prosecution of this application. Those cancellations do not establish any such thing. As is common in an ongoing research project, Appellants filed patent applications as the work progressed, with each application incorporating the prior application's coverage and adding new coverage for the more recent phase of the research. Each application was specifically identified as a continuation-in-part of its predecessor(s).

Appellants were well aware of the overlap. They cancelled each predecessor as it came up for response to an first Office Action, leaving only the current cumulative application for full prosecution.

Appellants are not aware of any precedent law, nor has the Examiner cited any, that prohibits an applicant from simultaneously having two or more applications copending that have overlapping claims. The PTO even has a procedure for resolving such overlaps between copending applications, which is set forth in M.P.E.P. § 804. Specifically, the Examiner is to call an applicant's attention to *potential* overlap by a provisional rejection,

but cannot reject either claim *until one is indicated as allowable*; M.P.E.P. ¶¶ 8.32. It will be noted that the Examiner failed to follow the prescribed procedure. Since Appellants had no obligation to cancel any claims of any copending application prior to an indication of allowability of claims in one of the cases, the Examiner's assertion that Appellants' voluntary cancellation of the predecessor applications somehow equates to "acceptance" of the Examiner's arguments is entirely without merit and inappropriate.

## B. Appellants' Claim Structure is Neither "Prolix" nor "Unduly Multiplied"

The Examiner contends that Appellants' original 164 claims are "unduly multiplied" in that "not simply are there too many claims, but that the claims also have very fine distinctions and have dependencies which create a convoluted structure to understand." (Examiner's Answer, p. 22, lines 4-7.) What the Examiner has done is confuse *complex* claim structures with so-called "prolix" or "unduly multiplied" claim structures.

There is nothing inherently wrong with a complex claim structure with numerous claims; M.P.E.P. § 706.03(k). The Examiner has from the start recognized that the present invention is (1) a unitary invention, and (2) that this unitary invention has numerous embodiments; See Paper No. 2, Office Action of December 3, 1999, in which the Examiner himself identifies twenty-eight embodiments. When the claimed invention is a complex system as is Appellants' vacuum conveyance system, applicant cannot be limited to only a few claims; M.P.E.P. §§ 706.03(k) and 2173.05(n). The Examiner has repeated his previous contention (Examiner's Answer, page 6, lines 1-3) that a "reasonable" claim structure is one which does not exceed the "average number of claims in a typical patent" of less than 2 independent claims and 17 total claims¹. Later on the Examiner objects to Appellants' claim structure on the ground that it contains more claims than are found in the specific prior art patents cited in Appellants' IDS and the Examiner's Office Actions (Examiner's Answer, page 24, lines 7-8).

The Examiner gives no source for this curious statistic. Is it the "average" from all 6,500,000+ U.S. patents dating from the 1800's? From some lesser subset? Which "average" is it - the mean? the median? the mode? How is such "average" related to the technical field of the present invention, as compared to simpler or more complex fields with greater or lesser claim structure requirements? This citation by the Examiner cannot be taken seriously without a complete definition.

Such objections have no basis in fact or law. Many applications have far more than the so-called "average" number of claims and both this Board and the C.C.P.A/C.A.F.C. have found multiplicity rejections to be without merit. See, for instance, *In re Hawkins*, 486 F.2d 569, 179 U.S.P.Q. 157, 160 (C.C.P.A., 1973) [multiplicity rejections based on 75 claims were reversed by both the PTO Board of Appeals and the C.C.P.A.] and *In re Goodman*, 476 F.2d 365, 177 USPQ 574, 576 fn.2 (C.C.P.A., 1973) [noting reversal of a prior multiplicity rejection based on 70 claims by the C.C.P.A. when the same case was previously before the court]. In the present case 164 claims is not excessive even by the Examiner's own standard. With the reasonable assumption that in his "average" patent above each independent claim represents an embodiment of the claimed invention, there are then an "average" of 8.5 claims per embodiment (17  $\div$  2 = 8.5). The Examiner has counted 28 embodiments of Appellants' unitary invention defined by 164 claims (or 177 claims, considering multiple dependencies). This is only 6.3 claims per embodiment, 25% fewer that the Examiner's "average" patent. It is therefore evident that Appellants have not "unduly multiplied" their claims structure, even by the Examiner's own standard<sup>2</sup>.

The Examiner now contends that he could not then and cannot now understand the claim structure, but it is noteworthy that he gives only minimal "evidence" of that by citing a few pairs of claims which he calls similar. The fact that that concept might be complex and require more than the "average" number of claims, or that examination of those claims might require a bit more effort than an "average" examination, cannot justify the Examiner's rejections; M.P.E.P. § 2173.05(n) and cases cited therein.

Appellants expended a great deal of effort to provide the Examiner with a simple manner in which to allow him to examine the complex invention — i.e., to concentrate on twenty claims which together define the principal embodiments of the invention. The dependent claims which depended from each of those claims, and further properly defined each embodiment (about which see more below) were offered by Appellants to be considered part and parcel of the twenty designated claims, and Appellants offered to

With respect to the so-called "average" it is noted that the patent law itself, and the PTO's own fee structure, allow 3 independent claims and 20 total without additional fee; 35 U.S.C. § 41(a)(1)(B) and 37 C.F.R. § 1.16(a), (b).

accept the ruling on the twenty claims as applicable to all of the remaining claims. (Paper No. 6, filed July 18, 2000)

The Examiner's response was to demand that the remaining claims be withdrawn and cancelled, thus *leaving Appellants with only a single claim for each embodiment and prohibiting Appellants from having any dependent claims to further define any specific embodiment.* This is in clear violation of M.P.E.P. § 2173.05(n) and the case law cited therein, which specifically requires that examiners must "afford the applicant some latitude in defining the invention."

There can be no contention that claims are "unduly multiplied" in a claim structure that covers several embodiments of a unitary inventive concept, merely because there are necessarily claims which appear similar *but which are in fact legally and technically significantly different*. It is well accepted that in a claim structure of the following type:

- 1. A device for doing a certain task
  - 2. A device as in Claim 1 of embodiment A
    - 3. A device as in Claim 2 having member Y
  - 4. A device as in Claim 1 of embodiment B
    - 5. A device as in Claim 4 having member Y

Claims 3 and 5, even though appearing identical, are in fact significantly different because they are respectively dependent from different embodiments of the invention; see M.P.E.P. § 706.03(k), first paragraph.

## C. The Rejection of the Claim Structure as "Prolix" is Inapplicable

According to M.P.E.P. § 2173.05(m), prolixity applies only to *individual claims* and then only when within the claim itself the language includes "such long recitations or unimportant details" that the scope of the claim "is rendered indefinite." The Examiner has never identified individual claims that are allegedly indefinite or not understandable. Since "prolix" does not apply to overall claim structure, the Examiner's rejection is without merit.

# D. Reentry of Appellants' Withdrawn Claims is Compelled by the Patent Rules Regarding "Multiplicity" Issues.

As discussed above, Appellants offered to designate twenty claims for examination

with the remaining claims being subject to the results of that examination. The Examiner refused that reasonable offer and instead demanded that all of the remaining claims must be withdrawn from consideration. Appellants at that time stated to the Examiner that upon conclusion of the examination they would amend the application to reinstate those of the withdrawn claims that would be allowable as dependent from those of the examined claims which had been found allowable. Acceptability of this procedure is clearly implied by M.P.E.P. § 2173.05(n), which states that multiplicity rejections must include *all of the claims which form the basis of the rejection*; paragraph bridging the first two columns of the section. It is clear from that section that in fact the Examiner's demand for withdrawal of the claims was itself unauthorized by PTO rules or procedures.

While the Examiner might have considered that examining more that twenty claims was too "tedious" because of alleged multiplicity [see the excerpt from *In re Wakefield* cited by the PTO in § 2173.05(n)], that cannot now justify refusal to allow Appellants to reinstate the withdrawn claims by amendment. It is clear from 37 C.F.R. § 1.75(b) and M.P.E.P. § 2173.05(n) that multiplicity is a factor only where it obscures the invention for examination or if the claims are not patentably distinct. The latter point has been addressed above and shown to be inapplicable in this case. As to the former point, now that the examination has been completed, and since Appellants have repeatedly assured the Examiner that they accept the results of the examination as applicable to *all* of the original claims, there can be no "multiplicity" reason for refusal to allow amendment for reentry of the withdrawn claims.

In summary, the Examiner newly asserts that Appellants' prior efforts to get their complete invention examined, as they had a right to, constitutes their acquiescence in the Examiner's contention that they were entitled to examination and inclusion of no more than some mythical "average" number of claims. That is not true. Appellants did not intend to settle for less than they have always been legally entitled to. The fact that they took some procedural steps (setting aside claims) to simplify the Examiner's consideration of the overall inventive concept, should not now be considered otherwise.

### THE BENNY ET AL. REFERENCE REJECTIONS

Most of the arguments advanced by the Examiner in support of the rejections based on Benny et al. have been addressed in Appellants' Brief. However, one new argument not previously made by the Examiner is found on page 3, page 5, of the Answer, in which the Examiner contends that Appellants' distinguishing of Benny et al. by claiming an "all vacuum" system is not persuasive because Appellants' system is allegedly not "all vacuum" and therefore Appellants' claims are all anticipated or made obvious based on Benny et al.

The Examiner contends that the vacuum pump at one end works in a positive pressure ambient environment, and that therefore no system which uses a vacuum pump can ever be "all vacuum" (see page 3, line14 through page 4, line 2 of the Answer). Such analysis entirely fails to evaluate the invention in accordance with the standard of the person skilled in the art and also fails to accord common meaning to the language of Appellants' claims.

Those skilled in the art would be well aware that a vacuum pump has on its non-system (upstream) side a positive pressure environment in contrast with negative pressure environment its operation creates on its system (downstream) side. No one skilled in the art would consider that to mean that the system to which the pump is connected with therefore anything other than an "all-vacuum" system. The Examiner has in fact acknowledged that, since to make his case for Benny et al. he must contend the extreme position that no such thing as an "all-vacuum" system can ever exist.

However, it is not necessary to give any weight to the Examiner's extreme assertion, since it will be noted that Appellants' claims are directed to a system for transporting and conveying ice *through the system* under vacuum motivation. That conveyance occurs *after* the vacuum pump. The ice is *not* inserted into the inlet of the vacuum pump; rather it is inserted into *the negative pressure environment of the conduits which are downstream of the vacuum pump*. The claimed invention therefore clearly is independent of the external environment of the vacuum pump.

Therefore, Appellants' invention as claimed is clearly distinguishable over Benny et al. As was shown in Appellants' arguments in their Brief, the Benny et al. system has its vacuum pump at its mid-point, thus creating negative pressure only in its inlet segment.

Ser. No. 09/364,794

The pump location, and the presence of the vacuum breaker on the outlet segment side, eliminates any possibility that fish drawn into the Benny system under negative pressure are motivated through the entire Benny et al. system by such initial vacuum. Those skilled in the art would reject any assertion that Benny et al.'s system past the vacuum pump was anything other than a purely gravity-motivated system.

#### CONCLUSION

For the above reasons, and taken in conjunction with arguments made in Appellants' Brief, Appellants reiterate their position a) that the invention as claimed in all of the claims under examination is patentable over Benny et al. with or without the supplemental references, and b) that the examined claims being patentable, the remaining claims set aside into order to simplify examination are also patentable, and should be reincorporated into the application such that all claims to which Appellants are properly entitled can be allowed, and that the Examiner's contrary decision should be REVERSED.

Date: September 17, 2002

By:

James W. McClain, Reg. No. 24,536

Respectfully submitted,

Attorney for Appellants

BROWN, MARTIN, HALLER & McCLAIN, LLP 1660 Union Street San Diego, California 92101-2926

Facsimile: (619) 238-0062

Telephone: (619) 238-0999

Docket No. 7480 PA1CP2

AF/3600\_



Please type a plus sign (+) inside this box - +

PTO/SB/21 (6-98)
Approved for use through 09/30/2000. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

			Application Numb	er	09/364,794	
TRA	NSMITT	AL	Filing Date		7/30/1999	
FORM (to be used for all correspondence after initial filing)		First Named Inven	itor	J. ERIC BERGE		
		Group Art Unit		3653		
		Examiner Name		Jeffrey A. Shapiro		
Total Number of	Pages in This Submi	ission 9	Attorney Docket Nu	ımber	7480PA1CP2	
		ENCLOS	SURES (check all tha	at apply)	)	
Amendment After Affida Extension of Express Aba Information I Certified Co Document(s Response to Incomplete	ttached  / Response  Final avits/declaration(s)  f Time Request andonment Request Disclosure Statement opy of Priority o Missing Parts/	Drawing  Licensin  Petition and Acc  Petition Provisio Change Address Termina  Small E	ng-related Papers Routing Slip (PTO/SB/6 companying Petition to Convert to a nal Application of Attorney, Revocation of Correspondence		After Allowance Communication to Group Appeal Communication to Board of Appeals and Interferences Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Additional Enclosure(s) (please identify below):  Return postcard  SEP 2 5 2002	
	or 1.53				GROUP 360	
т	SIGNATU	RE OF APPLI	CANT, ATTORNEY,	OR AG	ENT	
Firm or Individual name  JAMES W. Mc CLAIN						
Signature	Signature					
Date	September 17, 2002					
		CERTIFICA	ATE OF MAILING			
			ted with the U.S. Posta ox 2327, Arlington, VA		e as first class mail in an envelope on this date: 09/17/2002	
Typed or printed n	ame Karen I	. Johnson	1			
Signature	Muer	1 X. Y	msm	Date	September 17, 2002	

Burden Hour Statement: This form/is estimated to take 0.2 fours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be send to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.